

REMARKS

Throughout this amendment deletions are stricken through or double bracketed and added text is underlined.

By this amendment claims 1, 13, and 15 have been amended. The allowance of claims 16 and 8 is noted with appreciation. Claims 1-6 and 8-16 remain for consideration by the Examiner. Claims 1, 13, 15, and 16 are the only independent claims remaining for consideration. This amendment does not introduce any new matter. The amendments made herein are supported by the specification and drawings as originally filed, in particular page 8, third paragraph, page 14, first full paragraph from the bottom, and Fig. 5.

On May 11, 2004, a telephonic interview was held with Examiner Abrams to clarify the scope of the pending claims as amended on March 8, 2004. The Examiner was of the opinion that the claims as amended still read on the embodiments of Figs. 2 and 4 and that is the reason the rejections were maintained in the final office action. Applicants' representative explained that the amendments of January 26, 2004, and March 8, 2004, were specifically intended to exclude the embodiments of Figs. 2 and 4 by calling for at least one of the contact areas to by itself, i.e. without taking into account the other contact areas, meet the requirement that $V \geq 25$, where $V = \frac{L^2}{F}$, L is the perimeter of the at least one contact area, and V is the size, i.e. surface area, of the at least one contact area.

The Examiner in addition proposed that the claim should state that the contact area to which the limits on the ratio V apply is bounded by a single closed boundary

line. The examiner stated that with such an amendment the current rejection will most probably be overcome, however, he stated that a further search of the prior art would be necessitated by the proposed amendment.

Accordingly, the claims are being once again amended herein to even more clearly set forth that at least one of the one or more contact areas **by itself**, i.e. without taking into account the other contact areas, is bounded by a single closed boundary line and must meet the requirement that $V \geq 25$, where $V = \frac{L^2}{F}$, L is the perimeter of the at least one contact area (i.e. the length of the single closed boundary line), and V is the size, i.e. surface area, of the at least one contact area.

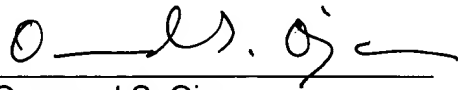
Clearly, the embodiments of Figs. 2 and 4 do not meet this requirement. The embodiment of Fig. 2 has a plurality of circular contact areas. For each of the circular contact areas $V = \frac{L^2}{F} = \frac{(2\pi r)^2}{\pi r^2} = 4\pi \cong 12.57$, where r is the radius of the circular contact area. Accordingly, no single contact area enclosed by a single closed boundary line in the embodiment of Fig. 2 meets the requirement that $V \geq 25$ by itself as required by the claims as amended. Similarly, the embodiment of Fig. 4 has a plurality of square contact areas. For each of the square contact areas $V = \frac{L^2}{F} = \frac{(4\ell)^2}{\ell^2} = 16$, where ℓ is the length of a side of the square. Accordingly, no single contact area enclosed by a single closed boundary line in the embodiment of Fig. 4 meets the requirement that $V \geq 25$ by itself as required by the claims as amended.

For the reasons stated above and in our responses of March 8, 2004, and January 26, 2004, the applicant respectfully submits that the present amendment places the application in condition for allowance and a notice to that effect is earnestly solicited.

If in the Examiner's opinion that is not the case, the Applicant asks that the Examiner kindly contact the undersigned by telephone in an effort to resolve any outstanding issues as expeditiously as possible.

Respectfully submitted,

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